



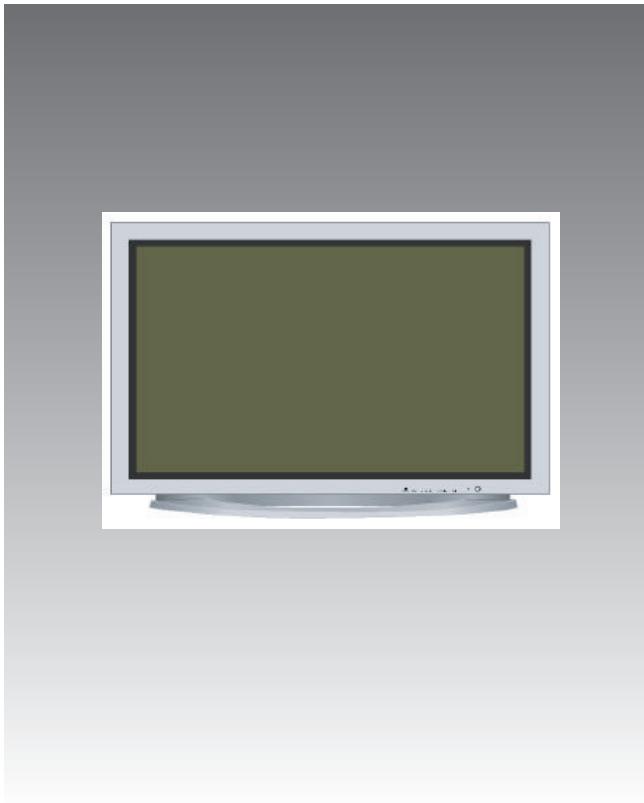
## PLASMA DISPLAY TV

**Chassis : D65C(P)Europe\_Rev.1**

**Model : PS42D4SX/BWT**

# SERVICE *Manual*

### PLASMA DISPLAY TV



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# 1. Specifications

MODEL		PS-42D4S/PS-42V4S
Screen Size		107 Cm / 42 Inches(16:9)
Dimensions	Display	1028[W] X 86.4[D] X 632.5[H] mm
	Remote Control	55[W] X 21[D] X 160[H] mm
Weight	Display	30kg[without stand]
	Remote Control	110g[including batteries]
Voltage		100-240V~, 50/60Hz
Power Consumption		330W
Number of Pixels		852[H] x 480[V]
ANTENNA input		VHF, UHF[75 Ω unbalanced]
VIDEO Input		Ext.1(Scart)
		Ext.2(Scart)
		AV
		S-VIDEO
		COMPONENT [480i,p/576i,p/720p/1080i]
		RGB[PC DSUB 15P] (D4 ONLY)
		DVI
AUDIO Input		Ext.1(Scart)
		Ext.2(Scart)
		AV/S-VIDEO
		COMPONENT
		PC(D4 ONLY)
		DVI
Output		VIDEO, AUDIO[L/R]
Speaker Output		15W + 15W[8 Ω]
Accessory		Remote Control, AAA batteries, Power Cord
		Antenna Cable, Owner's Instructions
		Ferrite Core, Speaker Cable

# **MEMO**

## 2. Alignment and Adjustments

### 2-1 Service Mode

#### 2-1-1 SERVICE MODE Entry Method (General Transmitter)

► Using the Customer Remote

1. Turn the power off and set to stand-by mode.
2. Press the remote buttons in this order; POWER OFF-INFO-MENU-MUTE-POWER ON to turn the set on.
3. The set turns on and enters service mode.

► Using the Factory Remote

1. Turn the power on.
2. Press the remote buttons in this order : Display-Factory.
3. The set enters service mode.

\* If you fail to enter service mode, repeat steps 1 and 2 above.

#### 2-1-2 Initial SERVICE MODE DISPLAY State

##### 2-1-2(A) OSD DISPLAY

Factory Mode	Current Input Mode	
01. Picture Improvement	▶	Indicates selected input mode
02. Initial Setting	▶	Picture Adjustment
03. PIP/TTX/Test Pattern	▶	Setting the Initial Values
04. Option-1	▶	Setting the Special Features
05. Option-2	▶	Options-1 : Particulars Product Options
06. Reset	▶	Options-2 : PDP Properties Options
		Initializing after saving the adjustments
		Software Version Information

Release : 2004-05-20-16:30

Version : T-NELPCI-1029

##### 2-1-2(B) Button Operations in SERVICE MODE

Menu	Displays all menus
UP/DOWN	Cursor moves to select items
LEFT/RIGHT	To increase and decrease the data of the selected items
◀ (ENTER)	Confirm your choice(Store OR Enter)
TV/VIDEO Button	Change input source

\* While in Tuner mode, the direct access buttons can be used to select and change channels.

## 2-2 WHITE Balance Coordinates

### 2-2-1 PS42D4S/PS42V4S White Balance Adjustment

1. W/B Adjustment is required for the following six modes :

DVI -> Component(720p) -> Component(1080i) -> PC -> VIDEO (Video port) -> VIDEO (Graphic port)

2. Adjustment Method (Signal equipment : MSPG-925LTH, Measurement equipment : CA210)

#### ■ MSPG-925LTH

Equipment that outputs analog and digital signals simultaneously  
(Analog / Digital signal output / TV signal output (S-Video included) / HDTV signal output)

- Digital Serial : TMDS (DVI24, Si160) + DVI-I (Analog, Digital)
- Monitor Signal (Analog): R, G, B, HS, VS, CS
- TV Signal(CVBS) : NTSC M, NTSC J (7.5 IRE On/Off) (BNC or RCA), PAL B, D, G, H, I, PAL M, Nc
- D-TV Signal (1080i, 720p, 480p)

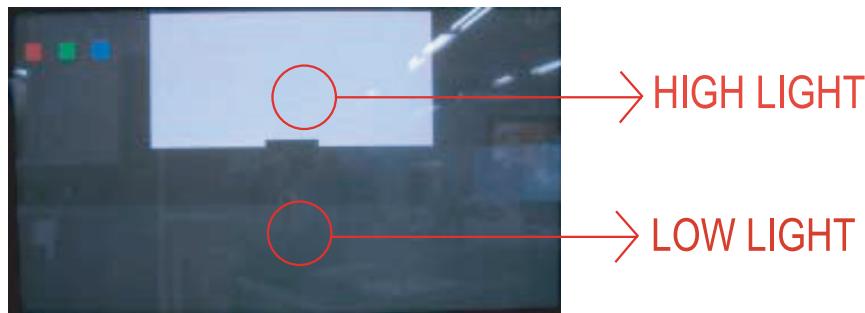
♣ MSPG-925 is used to adjust the W/B.

#### ■ CA210 : Color Analyzers adjusting brightness, chromaticity and etc.

- R.G.B monochrome correction, brightness and gamma character adjustment
- White Balance and flickering measurement

(a) DVI

- 1) Input Toshiba Pattern at 720p resolution using MSPG-925LTH (model:#6, pattern:#16).
- 2) These are the point of measurement using CA210.



3) Press "POWER OFF-INFO-MENU-MUTE-POWER ON" to enter the factory mode.

4) Select "01.Picture Improvement" -> "01.White Balance"

5) Keep the value of Y as adjusting "07.Sub Contrast(for HIGH)" & "08.Sub Brightness(for LOW)".

6) Keep the coordinate value of x and y as adjusting the value of R,G,B.

Adjust the coordinate x as the value of Red, and the coordinate y as the value of Blue.

<※ Generally, the value of Green is fixed.>

- Adjust the value of "Drive(01~03)" as the high point and the value of "Cutoff(04~06)" as low point.

※ Auto Color

- Must be executed in Component/PC before adjusting White Balance.
- 1) Input Auto Color Pattern with MSPG-925LTH(model:#6, pattern:#21).



- 2) Press "POWER OFF-INFO-MENU-MUTE-POWER ON" to enter the factory mode.
- 3) Select "01.Picture Improvement" → "01.White Balance" → "15.Auto Color" and Select "Off" → "On"
- 4) It takes a few seconds to execute it.

(b) Component

- 1) Execute Auto Color in the method described above.
- 2) Input Toshiba Pattern at 720p resolution (model:#6, pattern:#16).
- 3) Select "01.Picture Improvement" → "01.White Balance".
- 4) Adjust White Balance by selecting and adjusting Items 01. - 08. as performed in DVI mode.
- 5) Change input to Toshiba Pattern at 1080i resolution (model:#5, pattern:#16).
- 6) Adjust White Balance by selecting and adjusting Items 01. - 08. as performed in DVI mode.

(c) PC

- 1) Execute Auto Color in the method described above.
- 2) Input Toshiba Pattern at 800 x 600 (model:#16, pattern:#16).
- 3) Select "01.Picture Improvement" → "01.White Balance".
- 4) Adjust White Balance by selecting and adjusting Items 01 - 08 as performed in DVI mode.

(d) Video

The video signal uses the video port when there is no other input signal.

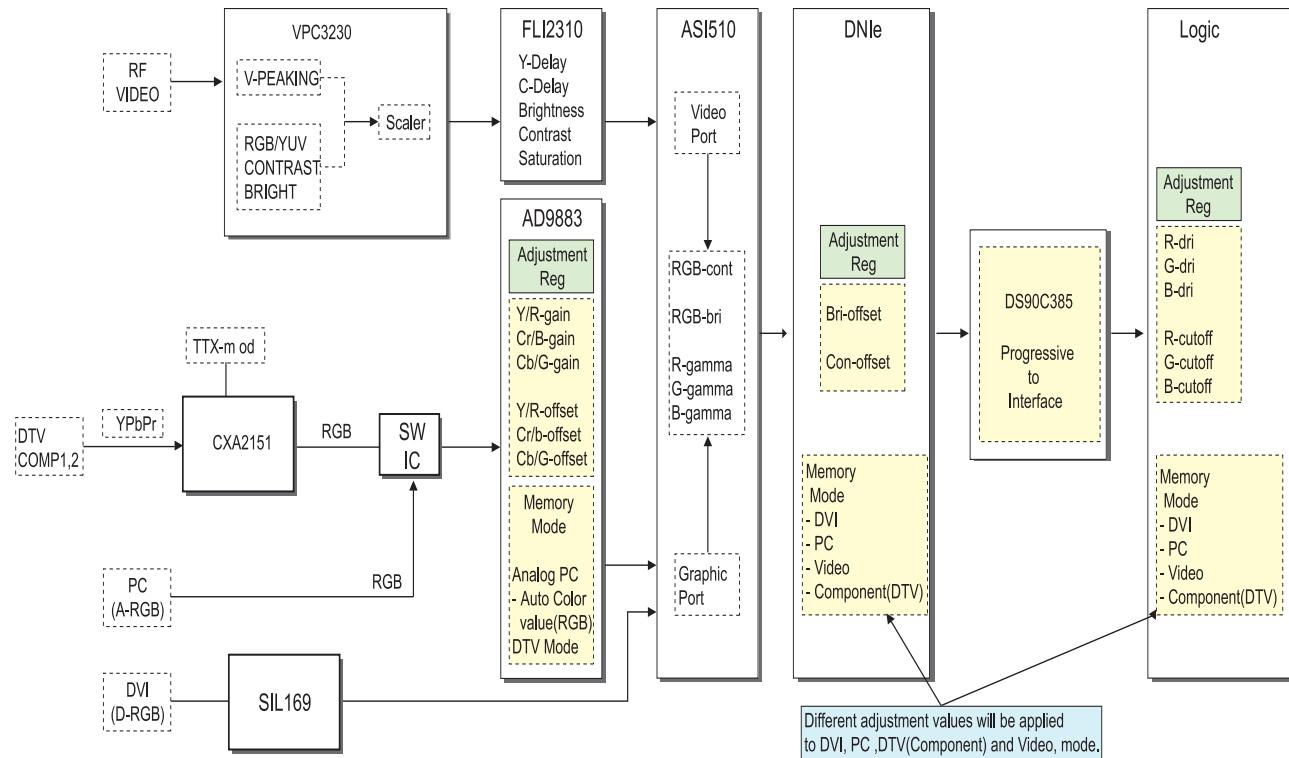
However, signal uses the graphic port in PIP mode, which includes other input signals (PC, DVI, Component, etc.), Video adjustment should be performed with Video port and Graphic port separately.

- 1) Input Toshiba Pattern to Video Input (model:#2, pattern:#16).
- 2) Select "04.Option-1" → "10.Video Port."
- 3) Set "10. Video Port" equal to "Video".
- 4) At Main SVC Menu, select "01.Picture Improvement" → "01.White Balance."
- 5) Adjust Items 01 - 08 as performed in DVI mode.
- 6) Return to Main SVC menu and select "04.Option-1" → "10.Video Port."
- 7) Set "10. Video Port" equal to "Graphic".

8) At Main SVC Menu, select "01.Picture Improvement" -> "01.White Balance".

9) Adjust Items 01 -> 08 as performed in DVI Mode.

\* Thus, Micom saves the W/B data separately for each memory mode of the block (See the block diagram given below) during W/B adjustment.



## 2-2-2 White Balance Coordinates by Mode(Europe)

		VIDEO	Component	PC(D4 ONLY)	DVI
H/L	x	285	285	278	280
	y	295	295	285	295
	Y(fL)	36	31	38	36
L/L	x	285	285	280	280
	y	295	295	295	295
	Y(fL)	0.6	0.7	0.6	1.8

## 2-3 Factory Data

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### 2-3-1 Factory OSD Main Menu

Factory Mode	Current Input Mode	
01. Picture Improvement	▶	Indicates selected input mode
02. Initial Setting	▶	Picture Adjustment
03. PIP/TTX/Test Pattern	▶	Setting the Initial Values
04. Option-1	▶	Setting the Special Features
05. Option-2	▶	Setting PDP Properties Options
06. Reset	▶	Setting PDP Properties Options
		Initializing after saving the adjustments
		Software Version Information

Release : 2004-05-20-16:30  
Version : T-NELPCI-1029

### 01.Picture Improve

01.Picture Improvement	Current Input Mode	
01. White Balance	▶	White Balance Adjustment
02. Color	▶	Color Adjustment
03. Cont/Bri Enhancement	▶	Contrast & Brightness Enhancement
04. Detail Enhancement	▶	Detail Enhancement Sharpness Adjustment
05. Y/C Delay	▶	Y/C Delay Setting according to the System and Input Modes
06. Motion	▶	Motion Enhancing Adjustment
07. DNle	▶	DNle Registers
08. Logic	▶	Logic Registers of the Panel
09. Picture Size	▶	Picture Size Registers

## 01.Picture Improve => 01.White Balance Adjustment

ITEM		Relevant IC	Initial Values of Input Modes			
			Video	Component	PC(D4 ONLY)	DVI
01.White Balance	TV		Mode-1	Mode-2	Mode-3	Mode-4
01.R Drive	140	Logic	140	140	140	140
02.G Drive	130		130	130	130	130
03.B Drive	120		120	120	120	120
04.R Cutoff	128		128	128	128	128
05.G Cutoff	128		128	128	128	128
06.B Cutoff	128		128	128	128	128
07.Sub Contrast	37		37	37	37	37
08.Sub Brightness	54	DNle	54	54	54	54
09.R Gain	142		X	128	128	X
10.G Gain	142		X	150	128	X
11.B Gain	142		X	128	128	X
12.R/Cr Offset	60		X	60	60	X
13.G/Y Offset	48		X	48	48	X
14.B/Cb Offset	64		X	64	64	X
15.Auto color	on/off		X	O	O	X
♣ Input modes require respective storing the changes after adjustment.						

01~06 : Logic

07~08 : DNle

09~15 : AD9883

## 01.Picture Improve => 02.Color Adjustment

ITEM		Relevant IC	Initial Values of Input Modes			
			Video	Component	PC(D4 ONLY)	DVI
02.Color	TV		Mode-1	Mode-2	Mode-3	Mode-4
01.Saturation	129	VPC3230	129	x	x	x
02.Tint	32		32	x	x	x
03.RGB/YUV U-SAT	35		35	x	x	x
04.RGB/YUV V-SAT	37		37	x	x	x
05.RGB/YUV Tint	0		0	x	x	x
06.FLI-saturation	130	FLI2310	130	x	x	x
07.R Gamma	32	ASI510	30	32	32	32
08.G Gamma	32		30	32	32	32
09.B Gamma	32		30	32	32	32
10.Gain-Sel	1	CXA2151Q	x	1	x	x
11.Cr Gain	7		x	7	x	x
12.Cb Gain	7		x	7	x	x
13.Y Gain	1		x	1	x	x
14. FLI-Y/G Bir	0	FLI2310	0	x	x	x
15. FLI-Cr/R Bir	9		9	x	x	x
16. FLI-Cb/B Bir	7		7	x	x	x

01~05 : VPC3230  
 07~09 : ASI510  
 06 : FLI2310  
 10~13 : CXA2151  
 14~16 : FLI2310

## 01.Picture Improve => 03.Contrast & Brightness Enhancement

ITEM		Relevant IC	Initial Values of Input Modes			
			Video	Component	PC(D4 ONLY)	DVI
03.Cont/Bri Enhancement	TV		Mode-1	Mode-2	Mode-3	Mode-4
01.Contrast	40	VPC3230	40	x	x	x
02.Brightness	27		27	x	x	x
03.RGB/YUV Contrast	28		28	x	x	x
04.RGB/YUV Brightness	67		67	x	x	x
05.FLI-Contrast	128	FLI2310	128	x	x	x
06.FLI-Brightness	128		128	x	x	x
07.R Contrast	32	ASI510	32	32	32	32
08.G Contrast	32		32	32	32	32
09.B Contrast	32		32	32	32	32
10.R Brightness	0		0	0	0	0
11.G Brightness	0		0	0	0	0
12.B Brightness	0		0	0	0	0

01~04 : VPC3230

07~12 : ASI510

05~06 : FLI2310

## 01.Picture Improve => 04.Detail Enhancement

ITEM		Relevant IC	Initial Values of Input Modes			
			Video	Component	PC(D4 ONLY)	DVI
04.Detail Enhancement	TV		Mode-1	Mode-2	Mode-3	Mode-4
01.VAPGAIN	4	uPD64083	4	x	x	x
02.VAPINV	16		16	x	x	x
03.YPFT	3		3	x	x	x
04.YPFG	9		9	x	x	x
05.Peaking	3	VPC3230	3	x	x	x
06.Peaking Filter	2		2	x	x	x
07.Coring	0		0	x	x	x
08.HPLL_ERR_MIN	18		18	x	x	x
09.HPLL_ERR_MAX	80		80	x	x	x
10.V_SLICER	0		0	x	x	x
11.HenhGain	64	FLi2310	64	x	x	x
12.HLEGain	64		64	x	x	x
13.HChrEnGain	32		32	x	x	x

01~04 : uPD64083

05~10 : VPC3230

11~13 : FLi2310

## 01.Picture Improve => 05.Y/C Delay Setting according to the System and Input Modes

ITEM	Relevant IC	Initial Values of Input Modes			
		Video	Component	PC(D4 ONLY)	DVI
05.Y/C Delay	VPC3230	TV	Mode-1	Mode-2	Mode-3
01. PAL-B/G		255	255	x	x
02. PAL-D/K/L		254	254	x	x
03. PAL-I		254	254	x	x
04. SECAM-B/G		251	251	x	x
05. SECAM-D/K/L		250	250	x	x
06. NTSC		254	254	x	x
07. PAL-AV		254	254	x	x
08. SECAM-AV		252	252	x	x
09. NTSC-AV		254	254	x	x
10. RGB/YUV-Y		90	0	x	x
11. RGB/YUV-UV		90	0	x	x
12. FLI-Y		5	5	x	x
13. FLI-C	FLI2310	11	11	x	x

01~11 : VPC3230

12~13 : FLI2310

## 01.Picture Improve => 06.Motion Enhancing Adjustment

ITEM	Relevant IC	Initial Values of Input Modes			
		Video	Component	PC(D4 ONLY)	DVI
06.Motion	TV	Mode-1	Mode-2	Mode-3	Mode-4
01.HPLL Speed-1	VPC3230	2	2	x	x
02.Auto Lock		0	0	x	x
03.V-motion Tresh	FLI2310	42	42	x	x

01 ~ 02 : VPC3230

03 : FLI2310

## 01.Picture Improve => 07.DNle Registers

ITEM	Relevant IC	Initial Values of Input Modes			
		Video	Component	PC(D4 ONLY)	DVI
07.DNle	TV	Mode-1	Mode-2	Mode-3	Mode-4
01.SUB BRIGHT	54	54	54	54	54
02.SUB CONT	37	37	37	37	37
03.SCALE MAX	48	48	48	48	48
04.SCALE MIN	16	16	16	16	16
05.TH HPF	0	0	0	0	0
06.TH EDGE	4	4	4	4	4
07.NR SEL	2	2	2	2	2
08.CE UPPER	240	220	200	240	240
09.CE CUTOFF	32	32	32	32	32
10. CE GAIN	64	64	80	64	64
11. DCE GAIN	75	75	75	75	75
12. SKIN ON	0	0	0	0	0
13. CTI GAIN	0	0	0	0	0
14. DE NOISE GAIN	8	8	8	8	8
15. TH CORING	3	3	3	3	3
16. PATT SEL	0	0	0	0	0
17.DE NR	1	1	1	1	1
18. NOISE TH2	100	100	100	100	100
19. H CONT	63	63	63	63	63
20. V CONT	11	32	63	63	63
21. BLACK GAIN	2	11	6	2	2
22. WHITE GAIN	31	31	31	31	31
23. WTE GAIN	44	44	44	44	44
24. CTE GAIN	176	176	176	176	176

01~24 : DNle

## 01.Picture Improve => 08.Logic Registers

ITEM		Relevant IC	Initial Values of Input Modes			
			Video	Component	PC(D4 ONLY)	DVI
08.Logic	TV	Logic	Mode-1	Mode-2	Mode-3	Mode-4
01.R DRIVE	140		140	140	140	140
02.G DRIVE	130		130	130	130	130
03.B DRIVE	120		120	120	120	120
04.R CUTOFF	128		128	128	128	128
05.G CUTOFF	128		128	128	128	128
06.B CUTOFF	128		128	128	128	128
07.GAMMA	1		1	1	1	1
08.GTS SET	1		1	1	1	1
09.ERD MODE	2		2	2	2	2
10.RANDOM NOISE	0		0	0	0	0
11.DIFF FILTER	1		1	1	1	1
12.APC	1		1	1	1	1
13.APC SET	0		0	0	0	0
14.APC VALUE	127		127	127	127	127
15.ACTIVE VPOS	12		12	12	12	12
16.ACTIVE HPOS	19		19	19	19	19
17.VSYNC POS	3		3	3	3	3
18.HSYNC POS	32		32	32	32	32
19.VSYNC WIDTH	2		2	2	2	2
20.HSYNC WIDTH	12		12	12	12	12

01~20 : Logic

## 01.Picture Improve => 09.Picture Size Registers

ITEM	Relevant IC	Initial Values of Input Modes			
		Video	Component	PC(D4 ONLY)	DVI
09.Picture Size	TV	Mode-1	Mode-2	Mode-3	Mode-4
01. H START OFFSET	0	ASI510	0	0	0
02. V START OFFSET	0		0	0	0
03. H END OFFSET	0		0	0	0
04. V END OFFSET	0		0	0	0
05.OVERSCAN B	38		38	38	38
06.OVERSCAN G	38		38	38	38
07.OVERSCAN R	38		38	38	38

01~07 : ASI510

## 02.Setting the Initial Values

02.Initial Setting	Current Input Mode	Indicates selected input mode
01. Initial P-Mode	▶	Indicates selected input mode
02. P-Mode Value	▶	Reset after saving the P-Mode adjustments
03. Initial Color Tone	▶	P-MODE the data Values
04. Color Tone Value	▶	Reset after saving the color tone adjustments
		Color tone the data Values

## 02.Initial Setting => 01.Initial P-Mode

01.Initial P-Mode Current Input Mode	Available options for the PC/DVI Mode are High,Middle, Low and Custom.
01. Dynamic 02. Standard 03. Movie 04. Custom	Available options for the PC/DVI Mode are High,Middle, Low and Custom.

## 02.Initial Setting => 02.P-Mode Value

02. P-Mode Value	Current Input Mode	Available options for the PC/DVI Mode are High,Middle, Low and Custom.
01. Dynamic	▶	Available options for the PC/DVI Mode are High,Middle, Low and Custom.
02. Standard	▶	Available options for the PC/DVI Mode are High,Middle, Low and Custom.
03. Movie	▶	Available options for the PC/DVI Mode are High,Middle, Low and Custom.
04. Custom	▶	Available options for the PC/DVI Mode are High,Middle, Low and Custom.

**02.Initial Setting => 02.P-Mode Value => 01.Dynamic**

<b>01.Dynamic</b>	<b>Current Input Mode</b>
01. Contrast	◀ 100 ▶
02. Brightness	◀ 45 ▶
03. Sharpness	◀ 75 ▶
04. Color	◀ 55 ▶
05. Tint	◀ 50 ▶

**02.Initial Setting => 02.P-Mode Value => 02.Standard**

<b>02.Standard</b>	<b>Current Input Mode</b>
01. Contrast	◀ 80 ▶
02. Brightness	◀ 50 ▶
03. Sharpness	◀ 50 ▶
04. Color	◀ 50 ▶
05. Tint	◀ 50 ▶

**02.Initial Setting => 02.P-Mode Value => 03.Movie**

<b>03.Movie</b>	<b>Current Input Mode</b>
01. Contrast	◀ 50 ▶
02. Brightness	◀ 55 ▶
03. Sharpness	◀ 25 ▶
04. Color	◀ 40 ▶
05. Tint	◀ 50 ▶

**02.Initial Setting => 02.P-Mode Value => 04.Custom**

<b>04.Custom</b>	<b>Current Input Mode</b>
01. Contrast	◀ 80 ▶
02. Brightness	◀ 50 ▶
03. Sharpness	◀ 50 ▶
04. Color	◀ 50 ▶
05. Tint	◀ 50 ▶

**02.Initial Setting => 03.Initial Color Tone**

<b>02.Initial Setting</b>	<b>Current Input Mode</b>
01. Cool2	
02. Cool1	
03. Normal	
04. Warm1	
05. Warm2	

♣ Available Settings for the PC Mode are

Custom,Color Tone 1, Color Tone 2, Color Tone 3

♣ Available options for the DVI Mode are

ColorTone1, ColorTone2, ColorTone3

## 02.Initial Setting => 04.Color Tone Value

04.Color Tone Value	Current Input Mode
01. Cool2	
02. Cool1	
03. Normal	
04. Warm1	
05. Warm2	

- ♣ Adjusting and Storing the Changes:  
Change the White Balance (Color Temperature)
- 1. Selecting an item will display the same options as those of White Balance.
- 2. Available options for the PC Mode are Custom, Color Tone 1, Color Tone 2, Color Tone 3
- 3. Available options for the DVI Mode are ColorTone1, ColorTone2, ColorTone3.
- 4. Data Storing is classified according to the PC Mode & Other Modes.

## 03.PIP/TTX/Test Pattern

ITEM	Relevant IC	Initial Values of Input Modes			
		Video	Component	PC(D4 ONLY)	DVI
03.PIP/Test Pattern	TV	Mode-1	Mode-2	Mode-3	Mode-4
01.PIP R CONT		32	32	32	32
02.PIP G CONT		32	32	32	32
03.PIP B CONT		32	32	32	32
04.PIP R BRIGHT		0	0	0	0
05.PIP G BRIGHT		0	0	0	0
06.PIP B BRIGHT		0	0	0	0
07.PIP FILTER LC		0	0	0	0
08.PIP FILTER ML		0	0	0	0
09.PIP FILTER MR		0	0	0	0
10.PIP FILTER UC	ASI510	0	0	0	0
11. TTX CONT		0	0	0	0
12. TTX BRIGHTNESS	SDA6001	0	0	0	0
13.LOG PATTERN		0	0	0	0
14.LOG HIGH LEVEL		255	255	255	255
15.LOG LOW LEVEL		0	0	0	0
16.ASI COLORBAR	1	1	1	1	1

01~10 : ASI510

11~12 : SDA6001

13~16 : Logic, ASI510

**04.Option-1**

<b>04.Option-1</b>	<b>Current Input Mode</b>	
00. D4/V4	◀ D4 ▶	00. D4 => V4
01. SCART/RCA	SCART	01. SCART(Full Input) => RCA(Delete Scart)
02. CW/CS	CW	02. CW(EUROPE) => CS(SOUTHASIA)
03. TELE-WEB	OFF	03. Off => On
04. LANGUAGE GROUP	EUROPE	04. Europe => Asia
05. LANGUAGE	ENGLISH	05. English => 18 Languages(Europe)
06. ATM	ON	06. On => Off
07. Melody Volume	10	07. 0 ~ 20
08. Picture Mode	Dynamic	08. Dynamic => Standard
09. LNA Search	OFF	09. Off
10. CHILD LOCK	ON	10. On => Off
11. TOP TTX	ON	11. On => Off
12. TTX Group	Osd Language	12. Osd Language => 6 Group
13. HIGH DEVIATION	OFF	13. Off => On
14. SD Delay	3	14. 0(default),1(27ms),2(54ms),3(108ms)
15. HD Delay	2	15. 0(default),1(27ms),2(54ms),3(108ms)
16. Video Port	Graphic	16. Graphic <-> Video
17. DOC Write	OFF	17. OFF->ON
18. Initial Write	OFF	18. OFF->ON

00. D4/V4 : D4 &lt;=&gt; V4

- D4 : PS42D4S MODEL (DSUB JACK it is)
- V4 : PS42V4S MODEL (DSUB JACK nothing)

01. Scart/Rca : Scart =&gt; RCA

- Scart : Europe & Scart area(All Input is selected)
- RCA : Southeast Asia & RCA area(Delete Scart)

02. CW/CS : CW =&gt; CS

- CW : PAL, SECAM-B/G, D/K, I, L/L', NTSC4.43 = West Europe
- CS : PAL, SECAM-B/G, D/K, I, NTSC3.58/4.43 = Countries except West Europe.  
Ex) Southeast Asia, the Middle East, Russia, China, etc.

03. Tele-Web

- Off : TeleWeb non-broadcasting Country
- On : TeleWeb broadcasting Country

04. Language Group : Europe =&gt; Asia

- Europe : 18 languages
- Asia : 7 languages

05. Language : Select language

- Language Group is Europe : 18 languages  
(English=>Bulgarian=>Croatian=>Czechoslovak=>Netherlandish=>French=>German=>Greek=>Hungarian=>Italian=>Poland=>Portuguese=>Rumanian=>Russian=>Spanish=>Swedish=>Turkish=>Yugoslave)
- Language Group is Asia : 5 languages  
(English=>French=>Chinese=>Arabic=>Persian)

06. ATM : On =&gt; Off

- ATM available region : On
- ATM non-available region : Off  
- ATM at the time of OFF one from Function item the Country is changed with the Area and the ATM is changed with auto search.

## 07. Melody Volume

- Able to adjust from 0 to 20.

## 08. Picture Mode : Dynamic &lt;=&gt;Standard

## 09. LNA Search

- On : Using LNA, Auto Search
- Off : Not in use LNA, Auto Search

## 10. Child Lock

- On : TV Model
- Off : Model has deletion of Child Lock function

## 11. Top TTX

- On : Only Top broadcasting region set 'On'  
Ex) Germany, Switzerland, etc
- Off : Country except Top broadcasting region.

## 12. TTX Group : TTX Language Group and National Option Code

- By language, Select at the factory option table.
- TTX language will be displayed by National Option code.
- TTX Language Group by each country : 6 Groups  
West Europe => East Europe => Turkish/Greek => Cyrillic => Arabic/Hebrew => Farsi/Hebrew=>Osd Language

## 13. High Deviation : To prevent Sound Buzz resulting from regional conditions of the input signals.

- Set to 'Off' for the standardized sound input signal, in the region such as Europe.
- Set to 'On' for the over-modulated sound input signal, in the region such as Southeast Asia.

## 14. SD Delay : AV mode Delay

- |                   |       |        |
|-------------------|-------|--------|
| 1.8ms delay       | ----- | delay0 |
| 27ms delay        | ----- | delay1 |
| 54ms delay        | ----- | delay2 |
| 108ms delay (max) | ----- | delay3 |

## 15. HD Delay : DTV/PC/DVI mode Delay

## 16. Video Port : Setting of Aurora Input Port for VIDEO signal

- Graphic : Input Video Signal though Graphic port of Aurora (In case of NON-PIP VIDEO)
- Video : Input Video Signal though Graphic port of Aurora (In case of PIP VIDEO)

## 17. DDC Write

- Off : Disable to write DVI DDC (DDC Write Protection)
- On : Able to write DVI DDC

\* In the initial stage of the Operational Inspection, DDC Write is enabled (DDC Write is ON).

DDC Write is disabled (DDC Write is OFF) after the Factory Reset.

\* To enable DDC Write at a later time, enter Factory Mode and set this menu to ON.

## 18. Initial Write

## 05.Option-2

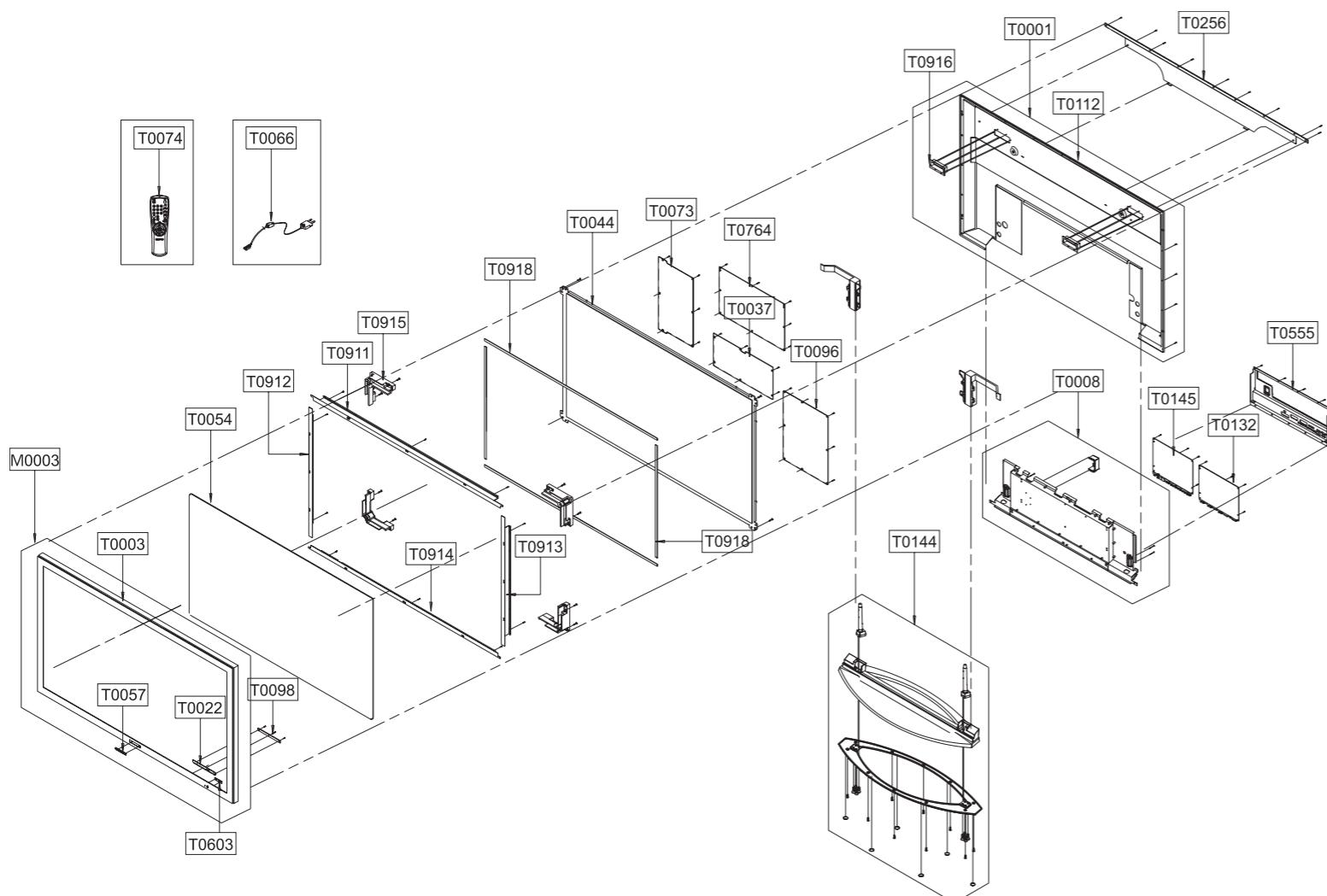
05.Option-2	Current Input Mode	
00. Pixel Shift	◀ V ▶	00. Off => V => G => V/G
01. Shift Test	◀ 0 ▶	01. 0: minute , 1: SEC
02. Pixel Number	◀ 1 ▶	02. Left,right movement Pixel
03. Pixel Line	◀ 1 ▶	03. Upper, low movement Pixel
04. Shift Time	◀ 4 ▶	04. Shift Test
05. Number Range	◀ 4 ▶	
06. Line Range	◀ 4 ▶	
07. Temp Protection	◀ On ▶	
08. DNle DEMO	◀ On ▶	
09. PILOT HIGH	◀ 21 ▶	
10. PILOT LOW	◀ 16 ▶	
11. CHECKSUM	◀ 0000 ▶	

### 3. Exploded View & Parts List

3-1 PS42D4SX/BWT

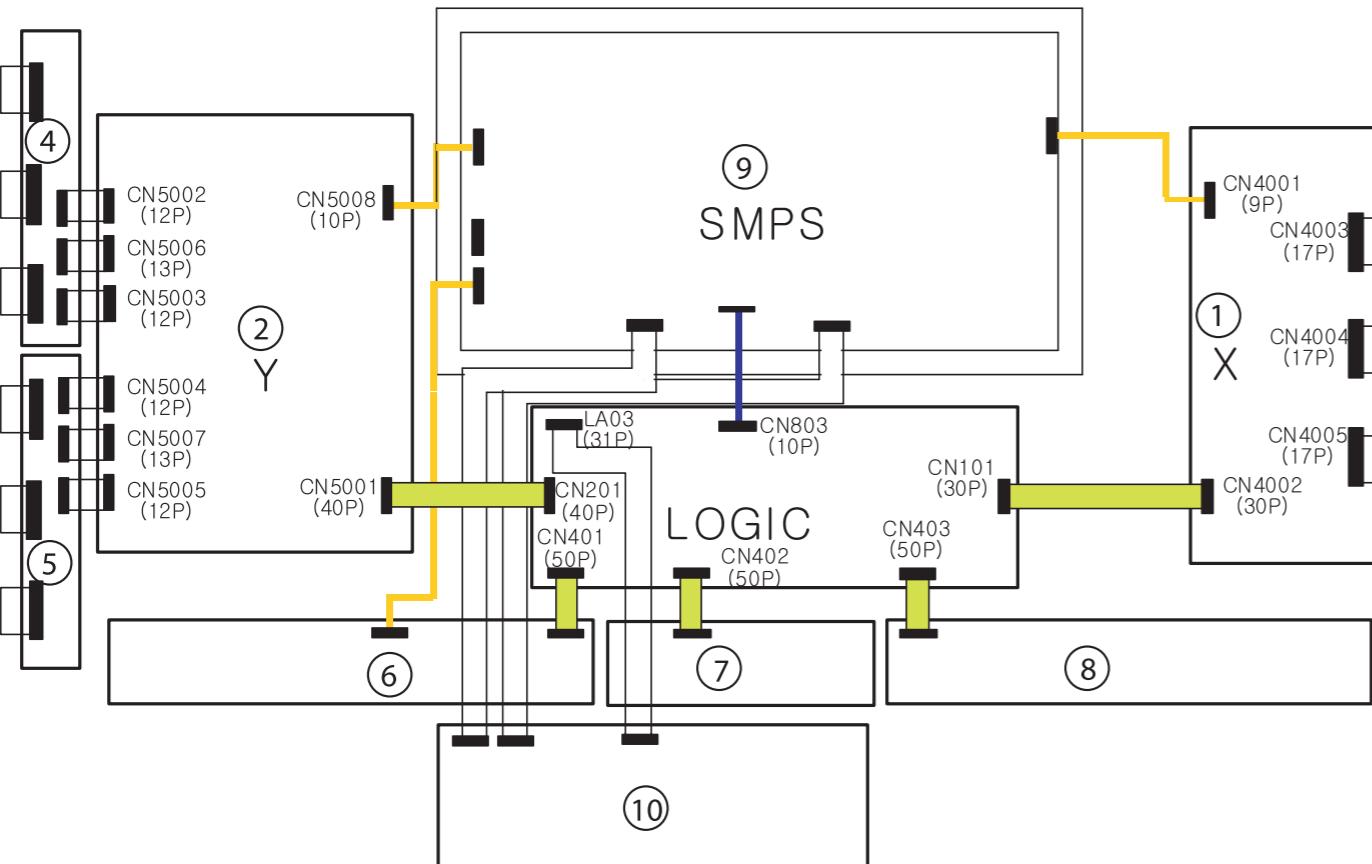
You can search for the updated part code through ITSELF web site.

URL : <http://itself.sec.samsung.co.kr>



Remark	Code No	Description	Specification	Q'ty	S.N.A
M0003	BN96-01207B	ASSY COVER P-FRONT;42D4,XEC,HIPS,HB,BLK,		1	
T0003	BN64-00280B	CABINET FRONT;42D4,HIPS,HB,BKM1326+SV012		1	S.N.A
T0057	BP64-00177A	BADGE-BRAND;ALL,AL,T1.5,70,11.3,BLK,SILI		1	S.N.A
T0022	BN64-00281A	KNOB CONTROL;42D4,ABS,HB,BLK		1	S.N.A
T0603	BN64-00282A	WINDOW-RMC;,PMMA CLEAR		1	S.N.A
T0098	BN94-00494B	ASS'Y PCB MISC-CONTROL;SPN4235,D54B,ALEX		1	
T0456	BN67-00105A	GLASS-FILTER EMI;42P3,MESH,48%,984*584,T		1	
T0911	BN61-00244E	BRACKET-FILTER TOP ASSY;42P3H,AL5052,1.2		1	S.N.A
T0912	BN61-00245H	BRACKET-FILTER SIDE L;42P3S,AL5052,1.2		1	S.N.A
T0913	BN61-00309E	BRACKET-FILTER SIDE R;42P3S,AL5052,1.2		1	S.N.A
T0914	BN61-00246E	BRACKET-FILTER BOTTOM ASSY;42P3S,AL5052,		1	S.N.A
T0915	BN61-00141A	HOLDER-MODULE;42P3,AL,DIECASTING		4	S.N.A
T0918	AA60-00110H	SPACER-FILTER;42P3,P/U FROM,960,5,6		2	S.N.A
T0044	BN96-01209A	ASSY PDP P-MODULE;M3,S42SD-YD,V3,42INCH,		1	
T0144	BN96-01208A	ASSY COVER P-STAND BASE;42D4,AL5052,T1.2		1	
T0764	BN96-01217A	ASSY MISC P-SMPS;SPP4231,PS42D4S,110~240		1	
T0073	BN96-00870A	ASSY PDP P-X MAIN BOARD;M3,S42SD-YD,D65A		1	
T0096	BN96-01211A	ASSY PDP P-Y MAIN BOARD;M3,S42SD-YD,V3,4		1	
T0037	BN96-01212A	ASSY PDP P-L MAIN BOARD;M3,S42SD-YD,V3,4		1	
T0008	BN96-00313D	ASSY COVER P-BACK SUB;42D4,AL5052,T1.2		1	S.N.A
T0132		ASSY PCB MISC-DIGITAL;PS42D4ST,D65C,NON		1	
T0145		ASSY PCB MISC-ANALOG;PS42D4ST,D65C,NELSO		1	
T0001	BN96-00314B	ASSY COVER P-BACK;PS42P3S,AL5052 T1.2,DG		1	
T0112	BN63-00529A	COVER-BACK;42P3H,AL 3031,T1.2		1	S.N.A
T0916	BN61-00202A	BRACKET-HANDLE;42P3S,AL5052,T1.5,DGM-S81		2	S.N.A
T0555	BN96-01280B	ASSY MISC P-BRKT TERMINAL;42D4,XEC,SHIEL		1	S.N.A
T0256	BN64-00143B	DECORATION-BACK;SPD-42P3H,PC+ABS,5V		1	S.N.A
T0074	AA59-00328A	REMOCON;,TM75,MUSE,36,G6148,EX,EUROP		1	
T0268	3903-000145	CBF-POWER CORD;DT,EU,FP3/YES,U(IEC C13-R		1	

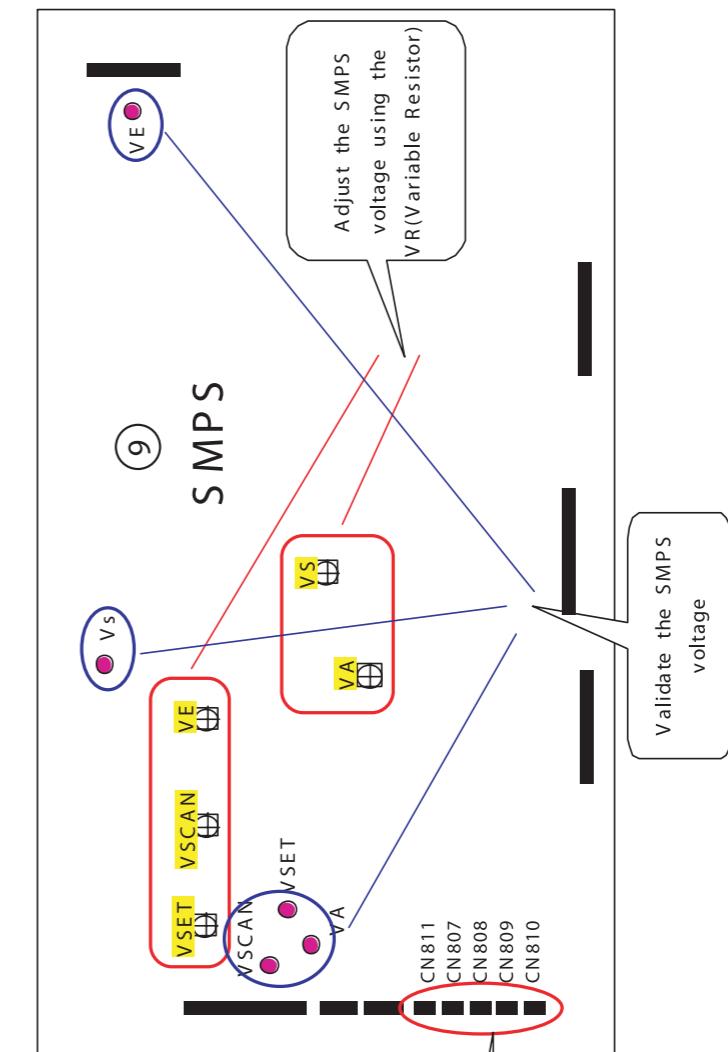
## 3-2 MODULE BLOCK



No	Description	Code No	Specification
-	ASSY PDP PANEL	BN96-01209A	M3,S42D-YD,V3,42INCH,SEMCO SMPS,D65A,V3.1
1	ASSY PCB X MAIN	BN96-00870A	M3,S42SD-YD,D65A,X MAIN BOARD,LJ92-00758A,V3
2	ASSY PCB Y MAIN	BN96-01211A	M3,S42SD-YD,V3,42INCH,V3.1,SDI CODE,LJ92-00944B
3	ASSY PCB LOGIC MAIN	BN96-01212A	M3,S42SD-YD,V3,42INCH,V3.1,SDI CODE,LJ92-00975C
4	ASSY PCB BUFFER(up)	BN96-00872A	M3,S42SD-YD,D65A,Y BUFFER(UP) LJ92-00796A,V3
5	ASSY PCB BUFFER(down)	BN96-00873A	M3,S42SD-YD,D65A,Y BUFFER LJ92-00797A,V3
6	ASSY PCB BUFFER(E)	BN96-01213A	M3,S42SD-YD,V3,42INCH,V3.1,SDI CODE,LJ92-00811A
7	ASSY PCB BUFFER(F)	BN96-01214A	M3,S42SD-YD,V3,42INCH,V3.1,SDI CODE,LJ92-00812A
8	ASSY PCB BUFFER(G)	BN96-01215A	M3,S42SD-YD,V3,42INCH,V3.1,SDI CODE,LJ92-00813A
9	ASSY PCB SMPS	BN96-01217A	SPP4231,PS42D4S,110~240V
10	ASSY PCB DIGITAL	BN94-00520A	PS42D4S,NELSON

Output Voltage See the labels attached on the base chassis

● Test Point  
⊕ VR : Variable Resistor



- + Notes  
- When the SMPS-PCB is replaced, the V<sub>A</sub>, V<sub>SCAN</sub>, V<sub>S</sub>, V<sub>E</sub> and V<sub>SET</sub> voltages must be checked and adjusted to the proper levels indicated on the panel sticker.

## 4. SERVICE ITEM

You can search for the updated part code through ITSELF web site.  
URL : <http://itself.sec.samsung.co.kr>

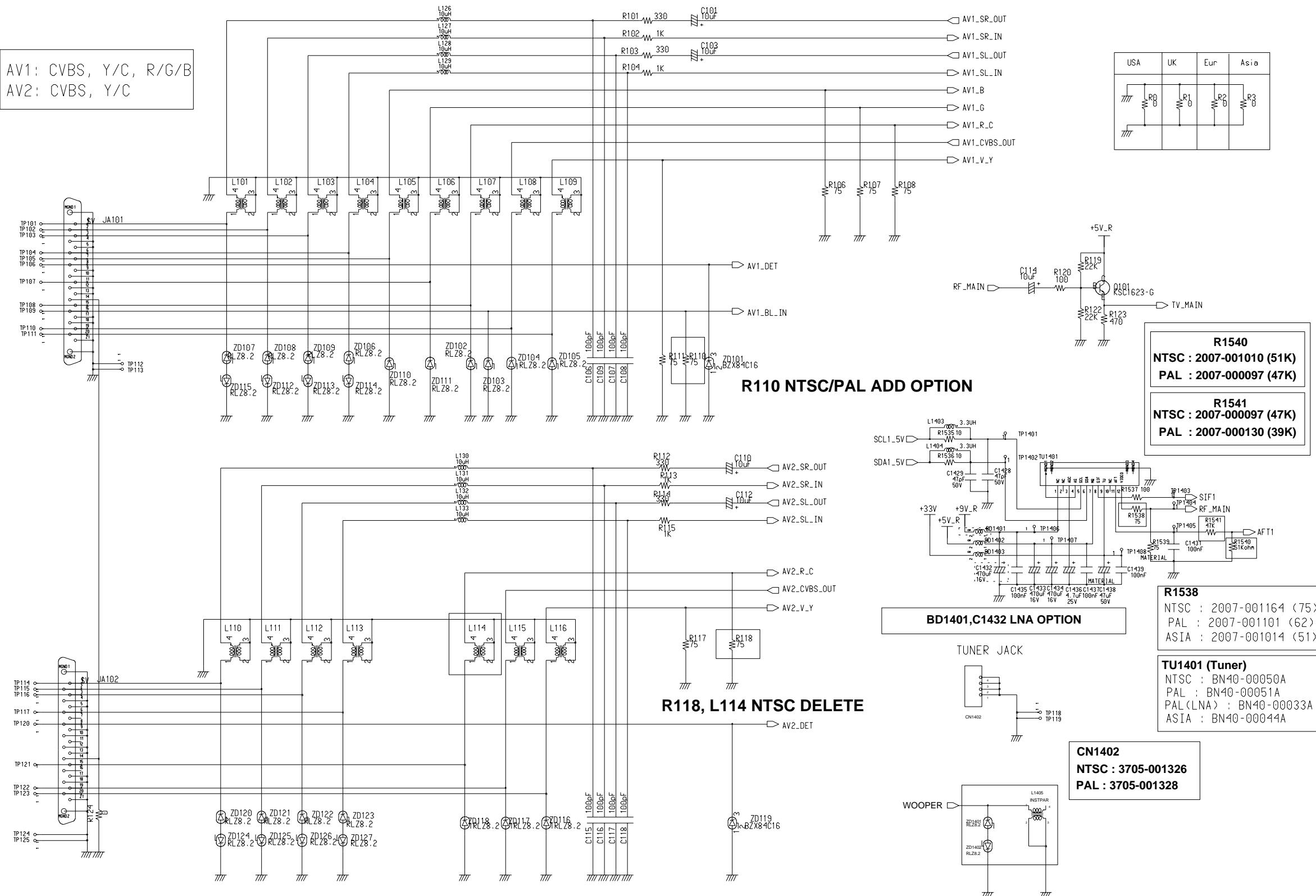
Loc.	Code No	Description;Specification	Q'ty	S.N.A
D0254	AA32-00013B	MODULE REMOCON;346HF5,38KHz,940mm,MESH,H	1	
T0568	AA39-30007A	CBF IF;-T,100mm,1365#26	1	
T0074	AA59-00328A	REMOCON;,TM75,MUSE,36,G6148,EX,EUROP	1	
TU1401	BN40-00033A	TUNER;TMQZ6-421A,PDP-NELSON,PAL CIS,181C	1	
	BN94-00562A	ASSY PCB MISC-MAIN;PS42D4S,D65C,CIS,BN41	1	
T0001	BN96-00314B	ASSY COVER P-BACK;PS42P3S,AL5052 T1.2,DG	1	
T0073	BN96-00870A	ASSY PDP P-X MAIN BOARD;M3,S42SD-YD,D65A	1	
T0091	BN96-00872A	ASSY PDP P-Y BUFFER (UP);M3,S42SD-YD,D65	1	
T0092	BN96-00873A	ASSY PDP P-Y BUFFER (DOWN);M3,S42SD-YD,D	1	
M0003	BN96-01207B	ASSY COVER P-FRONT;42D4,XEC,HIPS,HB,BLK,	1	
T0144	BN96-01208A	ASSY COVER P-STAND BASE;42D4,AL5052,T1.2	1	
T0044	BN96-01209A	ASSY PDP P-MODULE;M3,S42SD-YD,V3,42INCH,	1	
T0096	BN96-01211A	ASSY PDP P-Y MAIN BOARD;M3,S42SD-YD,V3,4	1	
T0037	BN96-01212A	ASSY PDP P-L MAIN BOARD;M3,S42SD-YD,V3,4	1	
T0113	BN96-01213A	ASSY PDP P-E BUFFER BOARD;M3,S42SD-YD,V3	1	
T0114	BN96-01214A	ASSY PDP P-F BUFFER BOARD;M3,S42SD-YD,V3	1	
T0033	BN96-01215A	ASSY PDP P-G BUFFER BOARD;M3,S42SD-YD,V3	1	
T0764	BN96-01217A	ASSY MISC P-SMPs;SPP4231,PS42D4S,110~240	1	

# MEMO

## 5. Schematic Diagrams

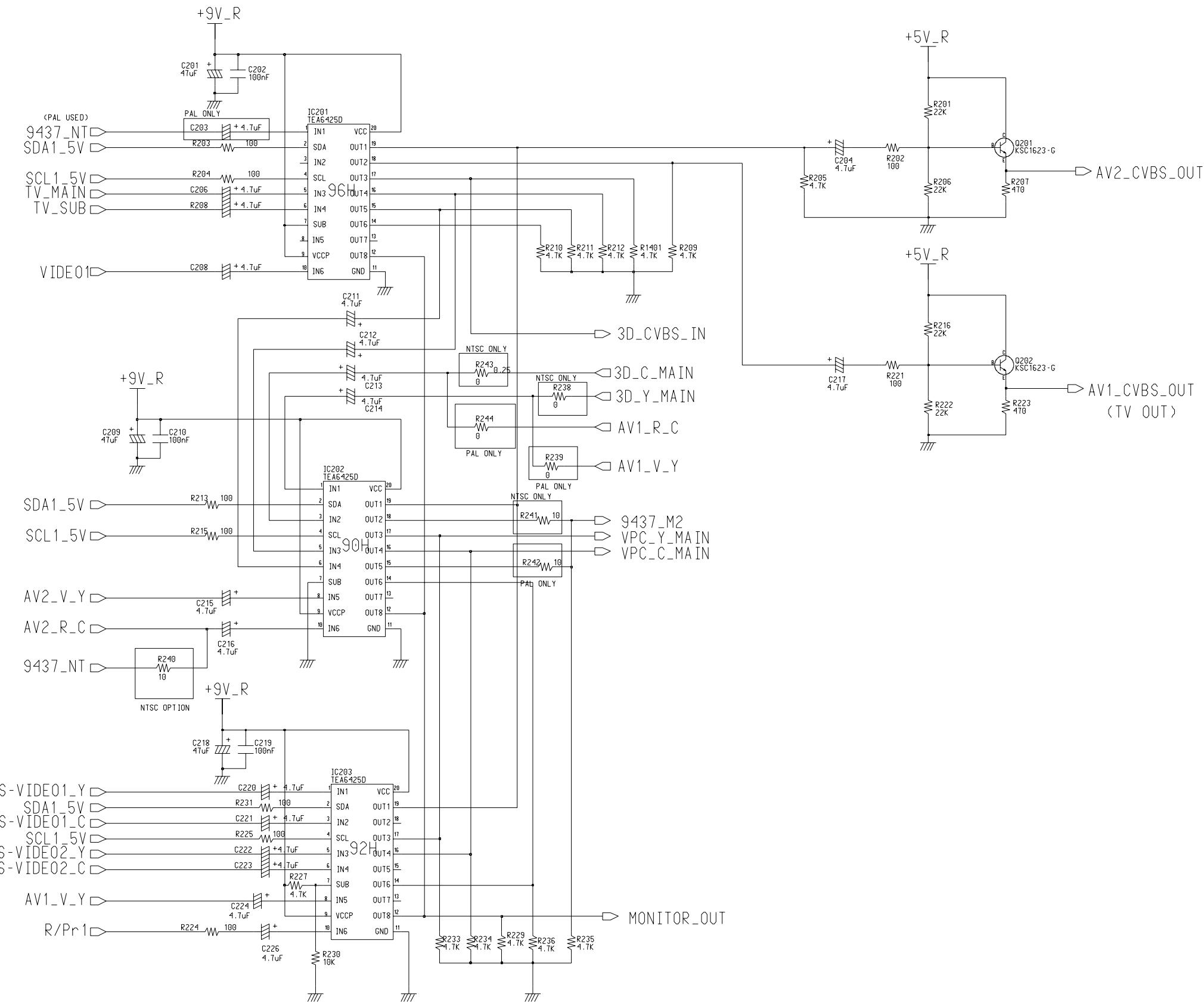
### 5-1 SCART

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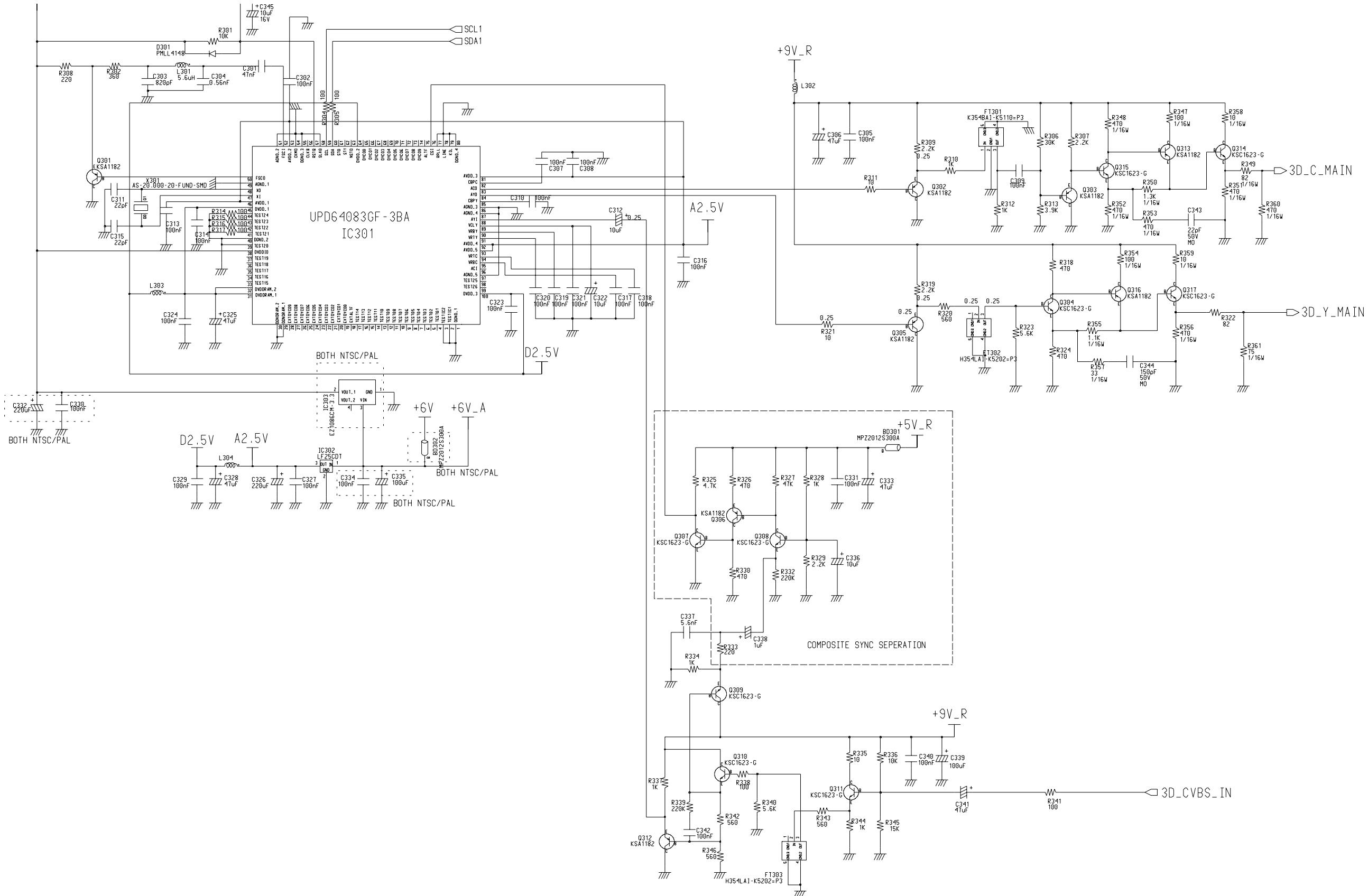
**5-2 VIDEO SW**

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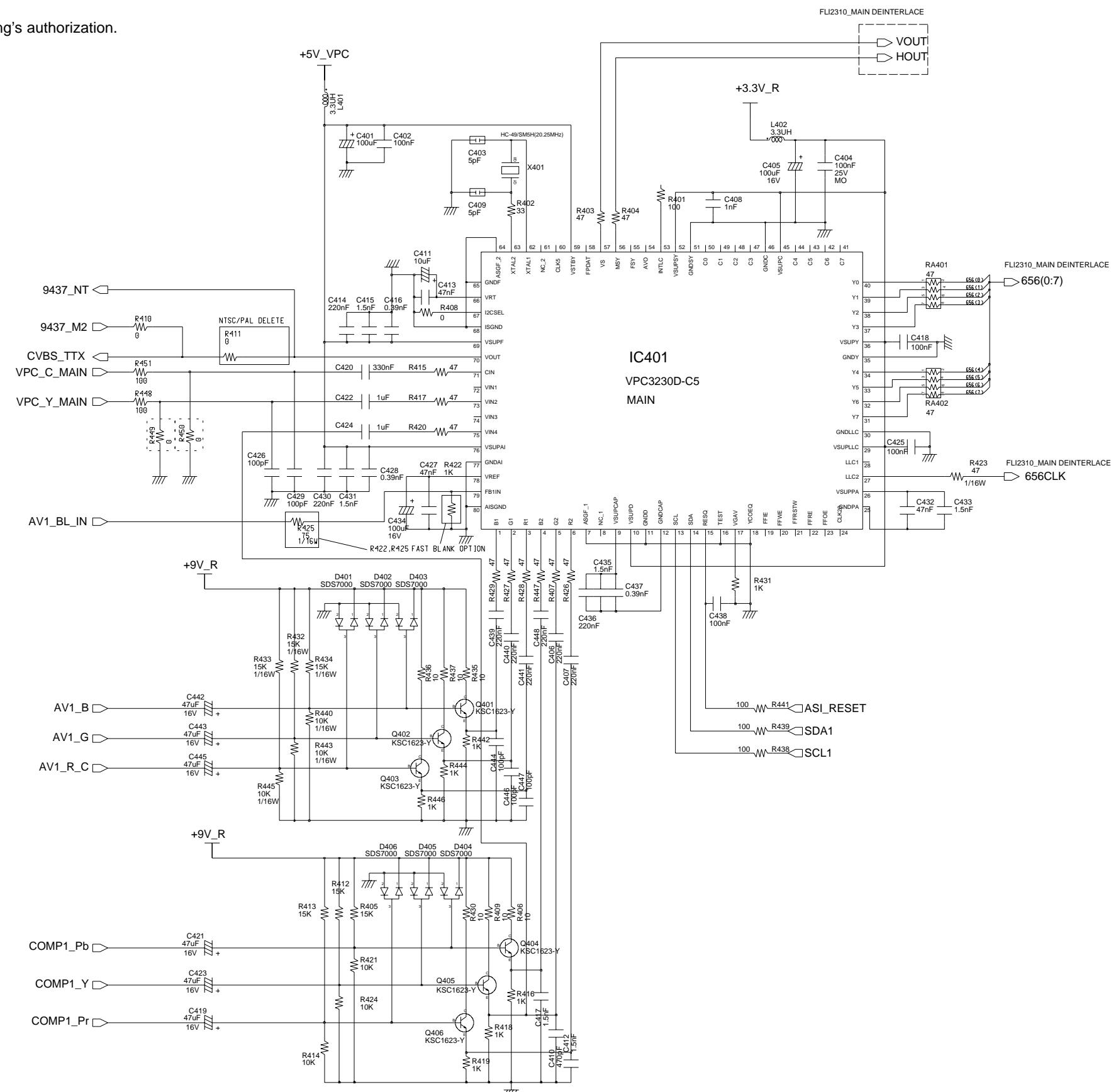
## 5-3 3D COMB

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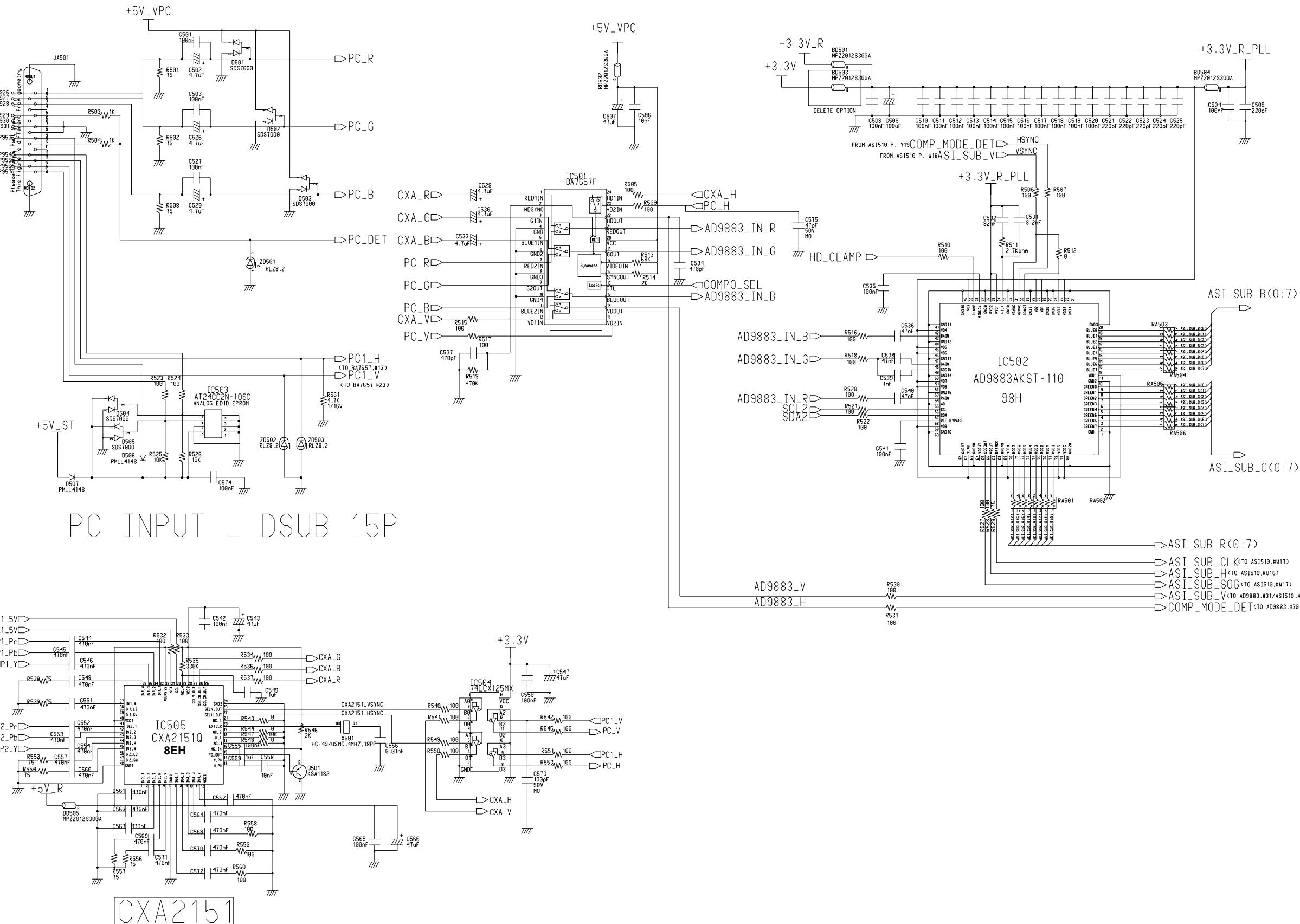
## 5-4 VPC3230

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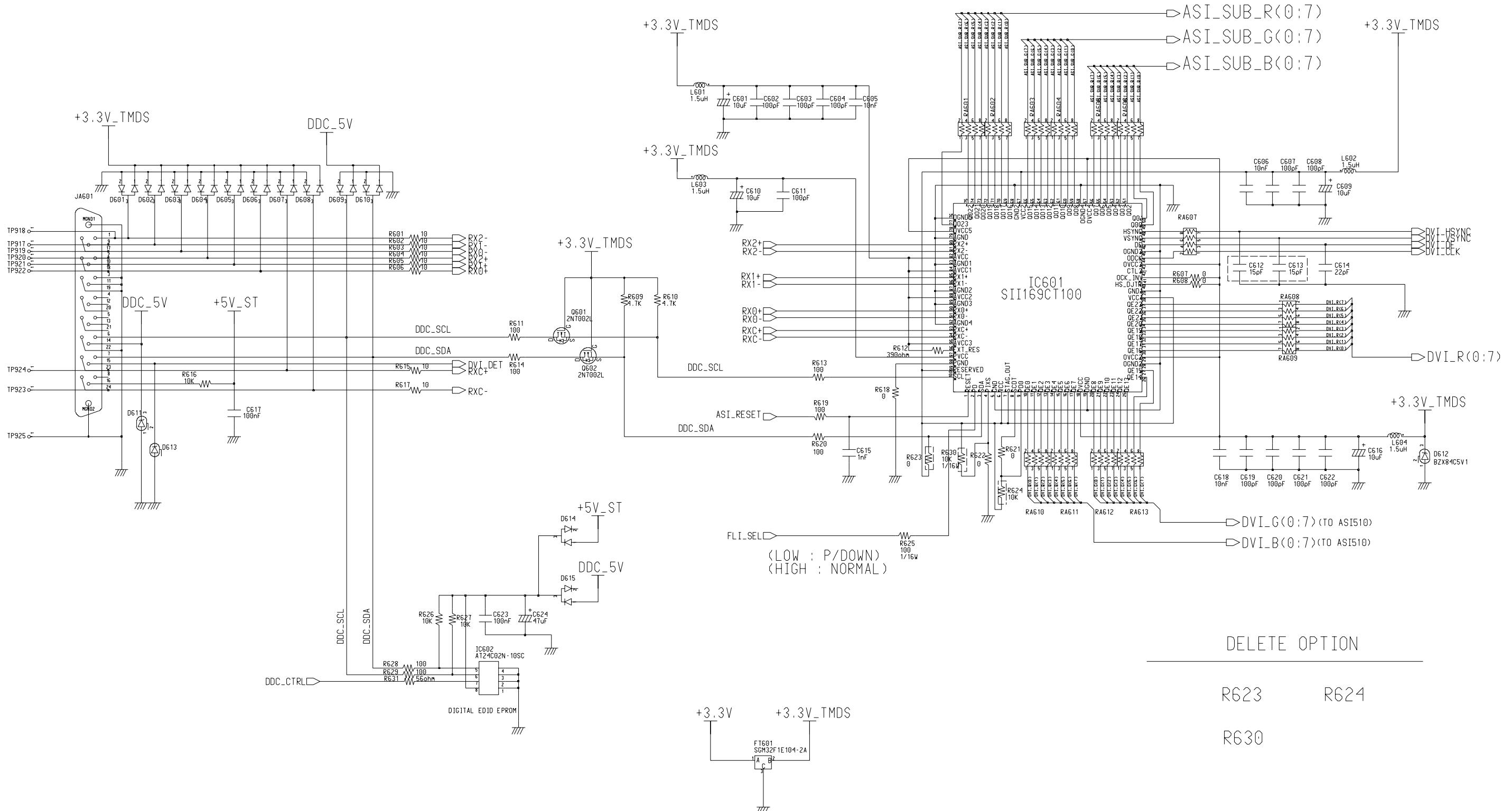
**5-5 PCIN\_9883\_2151**

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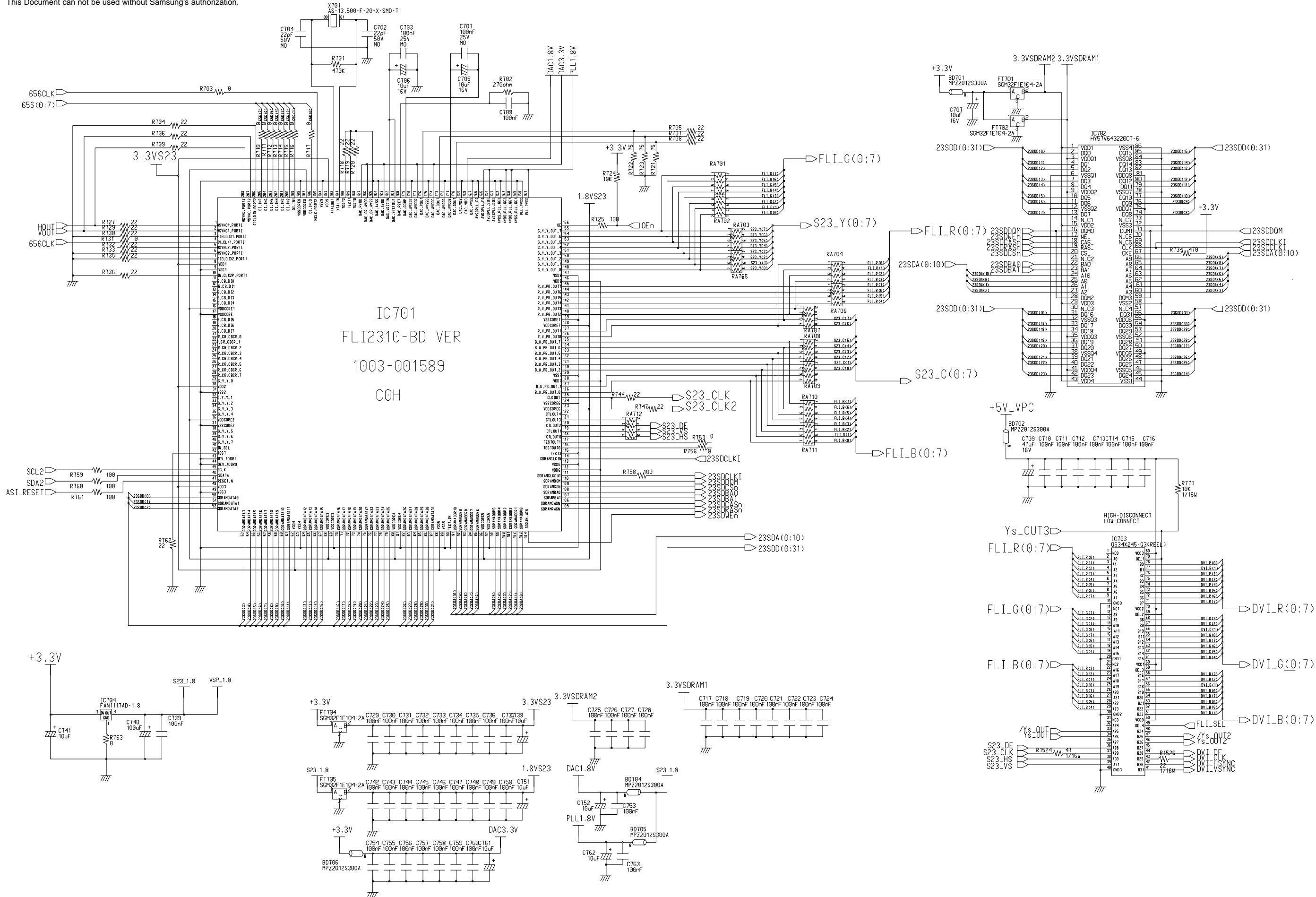
**5-6 DVI\_SIL169**

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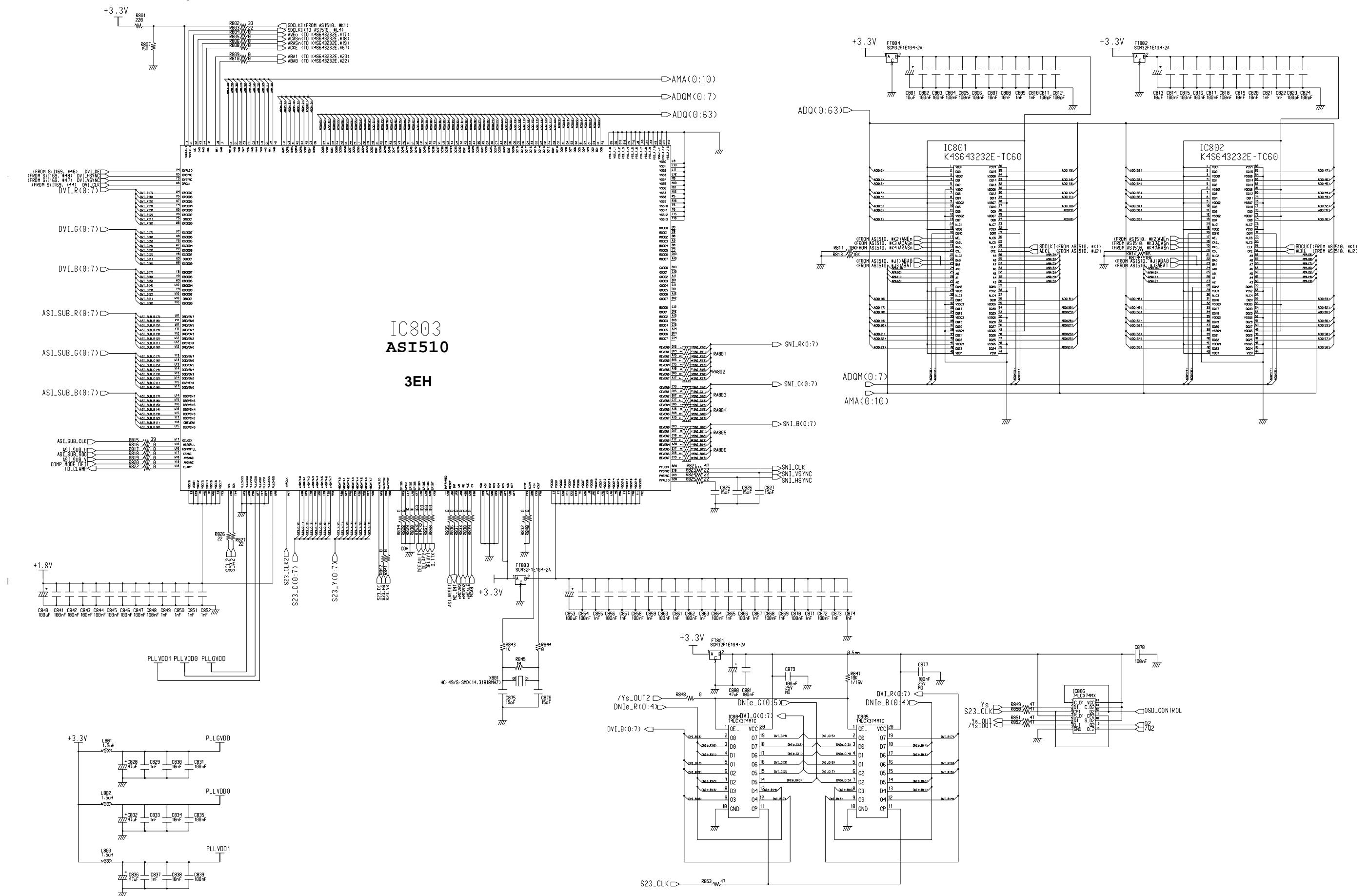
5-7 FLI2310

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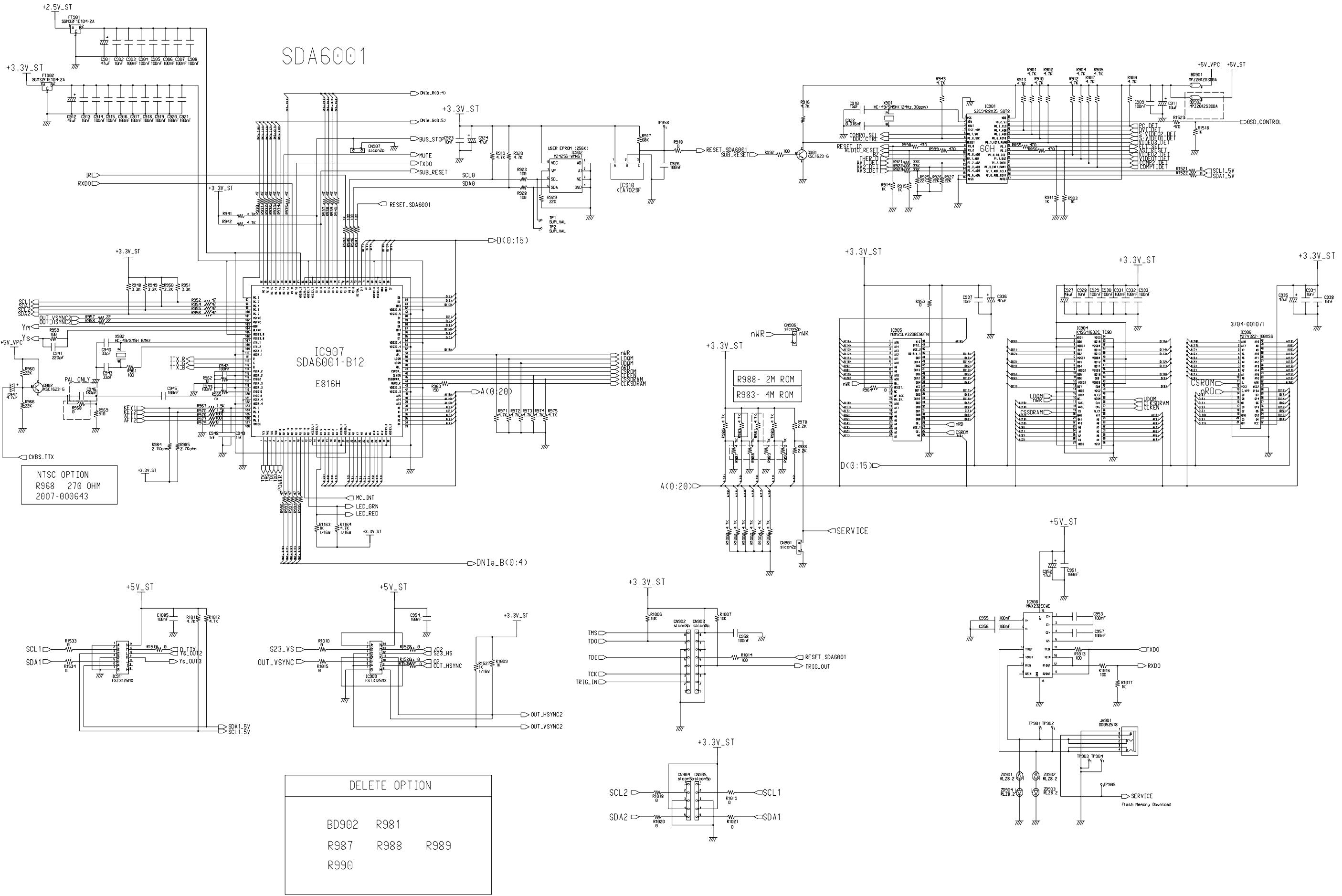
5-8 ASI510

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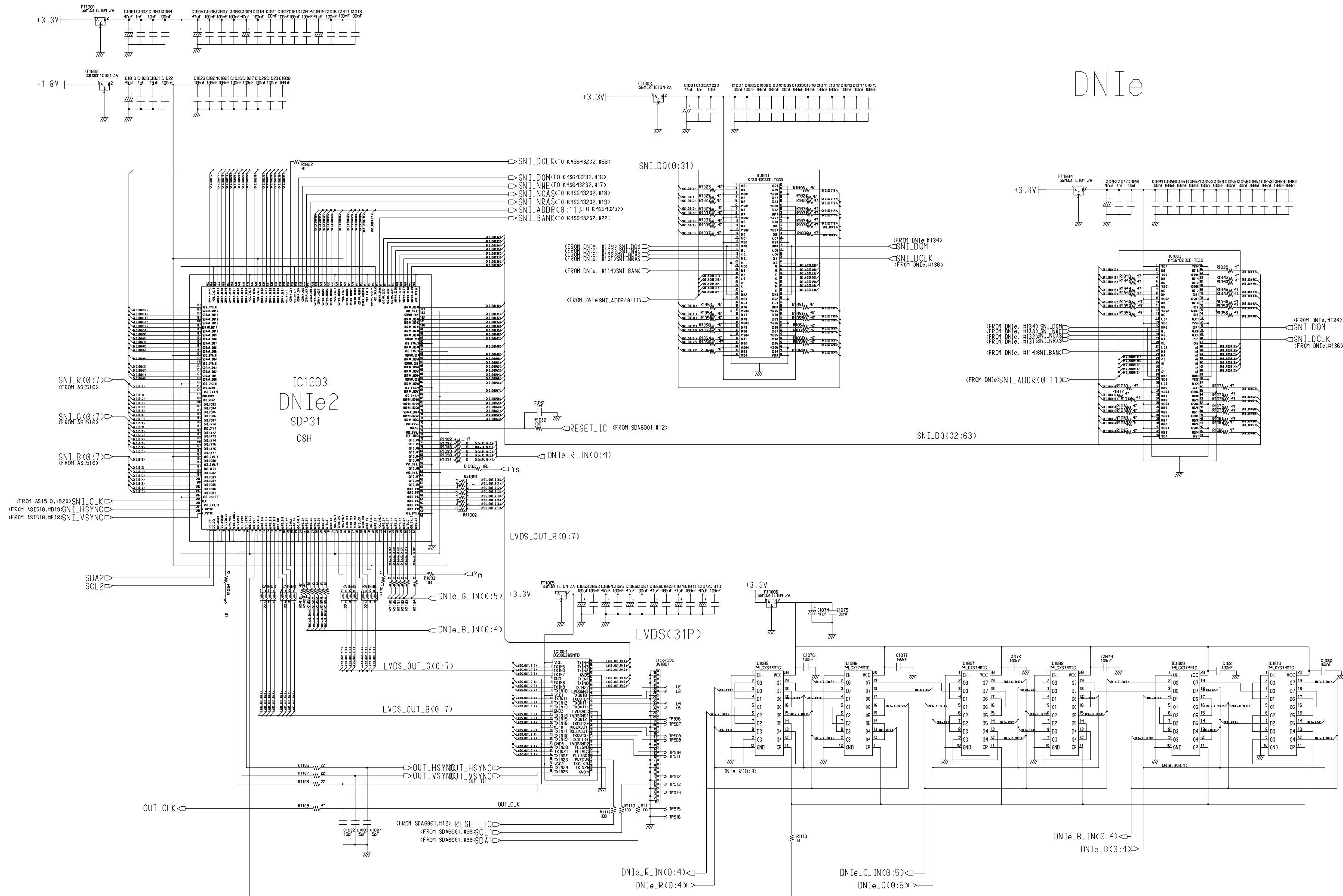
## 5-9 SDA6001

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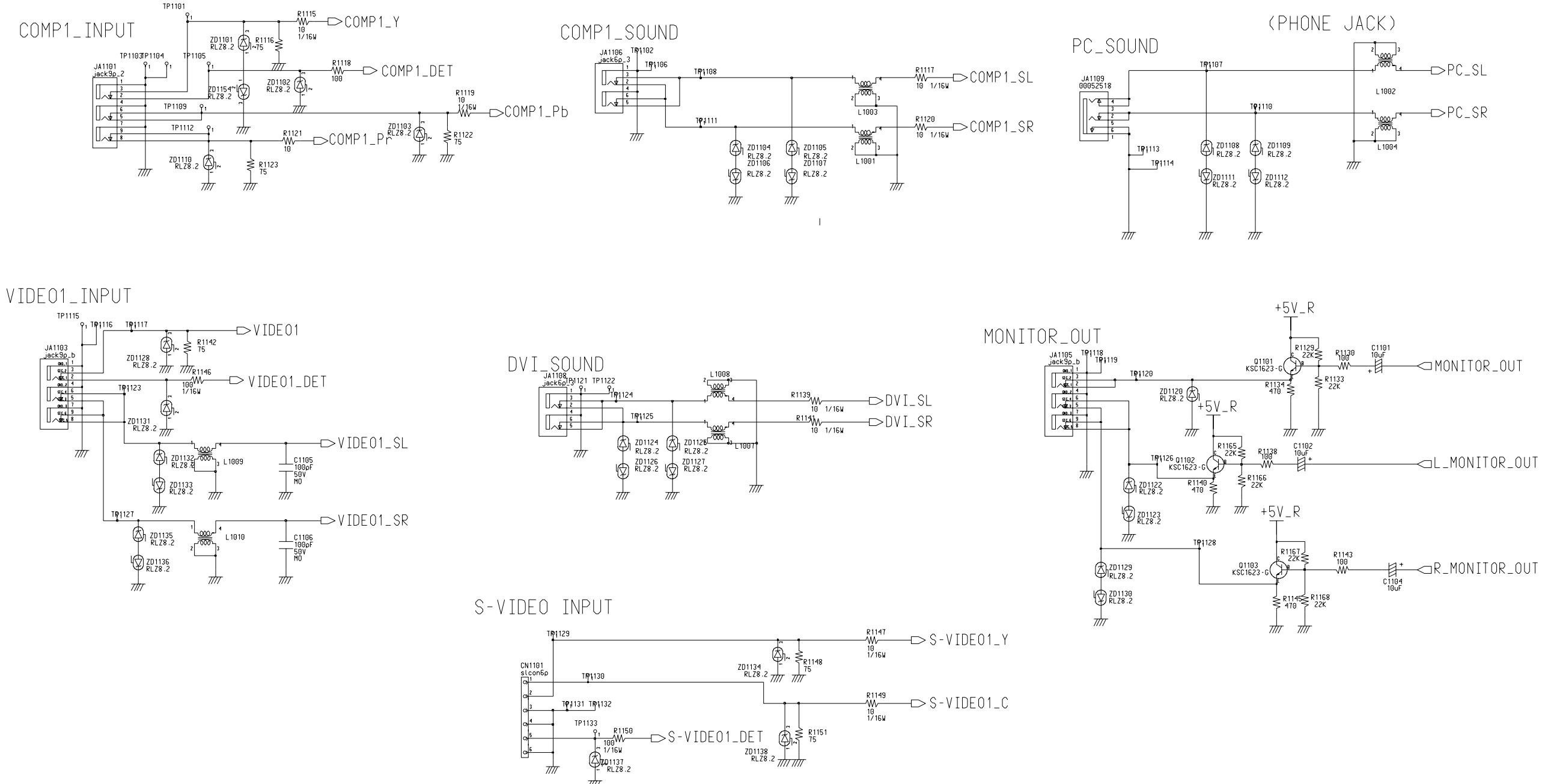
**5-10 DNle2**

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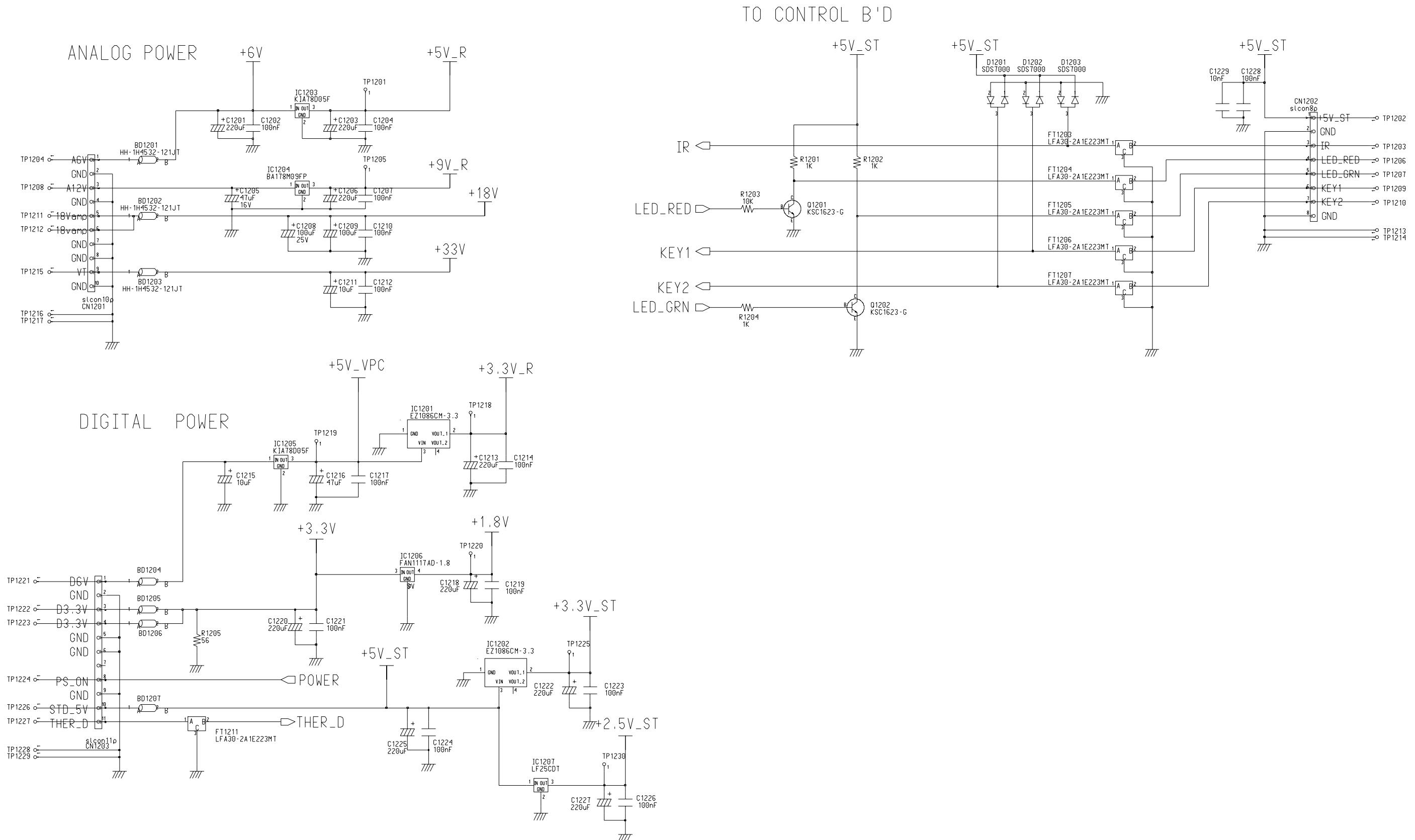
## 5-11 JACK INPUT

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**5-12 POWER**

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## 5-13 AUDIO

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